

WHAT IS CLAIMED IS:

- 1/ A motor vehicle beam shell designed to be placed behind a bumper skin, said shell being provided with a recess for receiving a strength member inside it, the strength member being, for example, a strength member made of metal, in particular of aluminum, or a strength member made of a composite material incorporating a metal, said shell being provided with shell cladding which interfits with the shell, thereby forming a hollow body defining the recess for receiving the strength member.
2. A shell according to claim 1, in which the recess is dimensioned to fit snugly around the outside shape of the strength member in certain regions, e.g. in the central portion of the shell or in the portion of the shell that is disposed in register with the side rails of the vehicle.
3. A shell according to claim 1, in which the recess is defined by a portion of the shell that has an open cross-section.
4. A shell according to claim 1, dimensioned to fit snugly into the inside shape of the bumper skin behind which the beam is to be placed.
5. A shell according to claim 1, provided with a plurality of recesses for receiving a plurality of strength members.
6. A shell according to claim 1, in which the recess includes impact-absorbing means, e.g. local honeycombs.
7. A shell according to claim 1, made of a thermoplastics material, in particular polypropylene.

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8. A shell according to claim 1, in which the shell cladding encloses the strength member.

5 9. A shell according to claim 1, provided with at least two fastening means for fastening to the structure of the vehicle, and in which the recess extends longitudinally from one fastening means to the other.

10 10. A beam shell according to claim 1, in which the recess is provided in register with a motor vehicle side rail when the shell of the beam is mounted on the vehicle.

15 11. A beam shell according to claim 1, in which the recess consists of a channel.

20 12. An assembly comprising a beam shell according to claim 1 and a strength member, in which assembly the strength member is a tubular side rail extension having a generator line substantially parallel to the longitudinal direction of the vehicle, in particular an extension in the form of a beveled tube.

25 13. An assembly according to claim 12, in which the extension received includes a support part, in particular a support for a stow/tow ring.

30 14. An assembly according to claim 12, in which the strength member performs a function of vertically supporting the beam.

35 15. A motor vehicle beam designed to be placed behind a bumper skin, said beam including a strength member and a shell according to claim 1.

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16. A motor vehicle beam designed to be placed behind a bumper skin, said beam including an assembly according to claim 12.

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